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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,518	02/27/2004	Sumant Ramprasad	030537	6898

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EXAMINER	
WAMBACH, MARGARET R	
ART UNIT	**PAPER NUMBER**
2816	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,518	RAMPRASAD, SUMANT	
	Examiner	Art Unit	
	Margaret R Wambach	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,2,9,14,15,22 and 23 is/are rejected.

7)☒ Claim(s) 3-8,10-13,16-21 and 24-32 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 27 February 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 10

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 14 and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Alidina et al (hereafter "Alidina".)

As recited in claims 1 and 14, Figure 2 of Alidina et al teaches a shifter circuit capable of shifting a plurality of input data bits (the data word from the source accumulator 24) to the left or right (dependant upon l/r) by a number of bit positions as a function of a binary value of a plurality of shift control bits (shift control bits are stored in auxiliary register 30 which controls the total number of bits shifted by controlling the number of bits shifted at each stage, see column 2, lines 14-21, for instance, Sext is also a shift control bit, see column 2, lines 18-21 and l/r is an additional control bit, see column 2, line 16) comprising a first shifter element or means (18'''') configured to perform one of two shifting operations (18'''' can shift one bit right or left or not at all as described generically in column 2, lines 31-34 and **as also recited in claims 2, 15**, please note that if three shifting operations are possible, then it follows that two shifting operations must be possible), a first one of the shift control bits (ar(0)) being used to select the shifting operation of one space right or left or not at all), a second shifter element or means (18''') configured to perform at least one shifting operation (18''' can

shift 2 bits left or right or not at all) on the first output bits to produce a plurality of second output bits (from 18''' to 18''), each of said at least one shifting operation being selectable from two shifting operations (again, the two operations being selected from the before mentioned three options), a different one of the control bits (ar(1)) being used to select each of the at least one shifting operation and a third shifter element or means (18'') configured to perform one of two shifting operations (18'' can shift 4 bits or not depending upon control bit ar(3)) on the second output bits, a second one of the shift control bits (ar(3)) being used to select the shifting operation performed by the third shifter element.

With regard to claim 9, neither the first or second shifter elements of Alidina lose any data bits although the values within the data bits are shifted, thus, in accordance with the commonly accepted meaning of the word "retain", the limitations of claim 9 are met.

With regard to claim 22, a method of shifting a plurality of input data bits (the data word from the source accumulator 24) to the left or right (dependant upon l/r) by a number of bit positions as a function of a binary value of a plurality of shift control bits (shift control bits are stored in auxiliary register 30 which controls the total number of bits shifted by controlling the number of bits shifted at each stage, see column 2, lines 14-21, for instance, Sext is also a shift control bit, see column 2, lines 18-21 and l/r is an additional control bit, see column 2, line 16) comprising performing a shifting operation on the input data bits (18'''' is configured to perform one of two shifting operations (18'''' can shift one bit right or left or not at all as described generically in column 2, lines 31-

34 and **as also recited in claim 23**, please note that if three shifting operations are possible, then it follows that two shifting operations must be possible) and using a first one of the shift control bits (ar(0)) to select the shifting operation, performing at least one shifting operation on the first output bits (18''' is configured to accept the output from 18'''' and shift 2 bits left or right or not at all) to produce a plurality of second output bits (from 18''' to 18''), a different one of the control bits (ar(1)) being used to select each of the at least one shifting operation and performing a shifting operation on the second output bits (18'' is configured to accept the second output bits and shift 4 bits or not) and using a second one of the shift control bits (ar(3)) to select the shifting operation.

Allowable Subject Matter

Claims 3-8, 10-13, 16-21 and 24-32 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret R Wambach whose telephone number is (571)272- 1756. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday 6am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Margaret R Wambach
Primary Examiner
Art Unit 2816

mrw